

AMENDMENTS TO THE CLAIMS

1. Claims 1 – 61 (Canceled)
62. (Previously presented) A jet fuel additive comprising;
 - a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
 - a carotenoid; and
 - a thermal stabilizer.
63. (Previously presented) The additive of claim 62 wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
64. (Previously presented) The additive of claim 62, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
65. (Previously presented) The additive of claim 62 wherein the plant oil extract is derived from barley and the carotenoid is β -carotene.
66. (Previously presented) The additive of claim 62 wherein the thermal stabilizer is meadowfoam oil.
67. (Previously presented) The additive of claim 62 further comprising a diluent.
68. (Previously presented) The additive of claim 62 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, jet fuel, jet fuel, 2 cycle oil, resid fuel and mixtures thereof.

69. (Previously presented) The additive of claim 62 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
70. (Canceled)
71. (Previously presented) A jet fuel comprising a base fuel and at least one additive wherein the additive comprises:
 - a plant oil extract derived from grain;
 - a carotenoid; and
 - a thermal stabilizer.
72. (Previously presented) The jet fuel of claim 71, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
73. (Previously presented) The jet fuel of claim 71 wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
74. (Previously presented) The jet fuel of claim 71, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
75. (Previously presented) The jet fuel of claim 71 wherein the plant oil extract is derived from barley and the carotenoid is β -carotene.

76. (Previously presented) The jet fuel of claim 71 wherein the thermal stabilizer is meadowfoam oil.
77. (Previously presented) The jet fuel of claim 71 further comprising a diluent.
78. (Previously presented) The jet fuel of claim 71 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, jet fuel, jet fuel, 2 cycle oil and resid fuel and mixtures thereof.
79. (Previously presented) The jet fuel of claim 71 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
80. (Canceled)
81. (Previously presented) A jet fuel comprising a base fuel and at least one additive wherein the additive comprises:
 - a hydrophobic plant oil extract;
 - a carotenoid; and
 - a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.
82. (Previously presented) The jet fuel of claim 81 wherein the plant oil extract is derived from a member of the Leguminosae family.

83. (Previously presented) The jet fuel of claim 81 wherein the plant oil extract is derived from grain.
84. (Previously presented) The jet fuel of claim 81 further comprising a diluent.
85. (Previously presented) The jet fuel of claim 81 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, jet fuel, jet fuel, 2 cycle oil and resid fuel and mixtures thereof.
86. (Previously presented) The jet fuel of claim 81 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
87. (Previously presented) The jet fuel of claim 81, wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
88. (Previously presented) The jet fuel of claim 81 wherein the plant oil extract is barley oil extract, the carotenoid is β -carotene.
89. (Previously amended) A jet fuel comprising a base feed and at least one additive wherein the additive comprises:
a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;

a carotenoid; and

a thermal stabilizer.

90. (Previously presented) The jet fuel of claim 89 wherein the carotenoid is selected from the group consisting of β -carotene, α -carotene, lycopene, leutin, betatene and mixtures thereof.
91. (Previously presented) The jet fuel of claim 89, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
92. (Previously presented) The jet fuel of claim 89 wherein the plant oil extract is derived from barley and the carotenoid is β -carotene.
93. (Previously presented) The jet fuel of claim 89 wherein the thermal stabilizer is meadowfoam oil.
94. (Previously presented) The jet fuel of claim 89 further comprising a diluent.
95. (Previously presented) The jet fuel of claim 89 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, jet fuel, jet fuel, 2 cycle oil and resid fuel and mixtures thereof.
96. (Previously presented) The jet fuel of claim 95 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

97. (Canceled)
98. (New) A jet fuel additive
 - a plant oil extract derived from barley
 - β-carotene;
 - and a thermal stabilizer.
99. (New) The additive of claim 98 wherein the thermal stabilizer comprises meadowfoam oil.
100. (New) The additive of claim 98 further comprising a diluent.
101. (New) The additive of claim 98 further comprising a solvent selected from the group consisting of toluene, benzene, p-xylene, m-xylene, o-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, diesel fuel, gasoline, 2-cycle oil, resid fuel and mixtures thereof.
102. (New) A jet fuel additive comprising:
 - a hydrophobic plant oil extract;
 - a carotenoid;
 - a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.
103. (New) The additive of claim 101 further comprising a diluent.
104. (New) The additive of claim 101 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, p-xylene, m-xylene, cyclohexanes, hexane, octanes, nonanes, jet fuel, diesel fuel, gasoline, 2-cycle oil, resid fuel and mixtures thereof.
105. (New) The additive of claim 101 wherein the plant oil extract is barley oil extract and the carotenoid is β-carotene.

106. (New) The additive of claim 101 further comprising meadowfoam oil.